GUIDELINES
FOR THE
IMPLEMENTATION OF A
NEIGHBORHOOD TRAFFIC
MANAGEMENT PROGRAM

CITY OF EL PASO
ENGINEERING DEPARTMENT
February 8, 2005

The Basic Philosophy

The purpose of the **City of El Paso Traffic Management Program** (CEPTMP) is to address speeding traffic on local residential streets. The goal of this program is to create an improved environment within neighborhoods that promotes safety for both the driver and neighborhood residents. The program will always attempt to focus on a neighborhood as a whole, not just one street or intersection.

The CEPTMP program is in response to an ever-increasing number of residents expressing concern regarding the safety and livability of their neighborhoods. Speeding on residential streets poses a danger to children playing adjacent to the streets, walkers, joggers, bicyclists and themselves.

Neighborhoods that have problems with speeding motorists are the main group this program is designed to help. For neighborhoods having other traffic related problems, the City of El Paso Traffic Engineering Division (TED) will work with these neighborhoods to find the appropriate solution to their problem.

Public roadways are open to all roadway users, however, these users are required to follow the 'rules of the road' as set forth by federal, state, and local laws. The CEPTMP focuses on the simple rule of obeying the posted speed limit while driving on residential streets.

After receiving a properly completed application from either a City recognized Neighborhood Association or City recognized Neighborhood Watch (all references herein to either a Neighborhood Watch or Neighborhood Association shall be intended to include both), the TED staff will conduct field inspections, collect and analyze data, and work with residents to identify the type, cause and severity of traffic issues to determine if a neighborhood is eligible to participate in the CEPTM. If it is determined that the primary traffic problem being experienced by the neighborhood on local residential streets is traffic not obeying the posted speed limit, the neighborhood may qualify for the CEPTMP.

TED staff will then work with the neighborhood to select traffic management techniques that aim to safely control traffic within the entire neighborhood not just at an isolated site. The techniques used must be compatible with street activities and adjacent land uses. Public streets are not intended to be play areas for children or adults. The CEPTMP seeks to improve safety for pedestrians, bicyclists, motorist and all other road users by implementing calming measures in progressive steps. The first step and least intrusive, is education. The second is enforcement. From there, steps might include narrowing the driving lanes by installing bike lane markings, installing certain types of landscaping, installing chicanes/diverters, installing bulbouts/neckdowns/chockers, installing manufactured speed cushions or pillows, or other alternatives.

Some residents also drive through their own neighborhoods in an inattentive or careless manner. When residents speed in their own neighborhood, the best

approach to solving this is a combination of enforcement and peer pressure. It is the neighborhood's responsibility to try help solve internal problems.

This document provides guidelines, procedures, and techniques to assist the City of El Paso Engineering, Police Department staff, and neighborhood residents in implementing CEPTMP projects.

The City continues to examine many different neighborhood traffic management techniques in use. Realizing that El Paso neighborhoods are not all the same and have a variety of different street designs, the CEPTMP program includes a wide range of techniques that may be used to address unique street and traffic conditions on local residential streets. These techniques will evolve as the state of the art of traffic management evolves.

Traffic management techniques generally fall under two categories - **physical and psychological**. In general, low volume wide roads encourage higher automobile speeds. Consequently, many traffic management techniques are designed to physically change the width or alignment of the street. Techniques such as striping patterns, neckdowns, roundabouts and medians can decrease road width.

Traffic management may be achieved by changing the psychological feel of the roadway. Streets using different surface types, vertical landscaping or narrowed lanes create the appropriate space for a relaxed, pedestrian-friendly feel. These psychological changes give motorists cues that they are no longer on a major roadway but are in a residential environment and they must share the roadway with other users. Impacting the psychological feel of the roadway is always the preferred method of reducing speeds.

If a motorist can see far into the distance, their speed generally increases. Sight lines can be interrupted or decreased by using techniques such as slow-points, roundabouts, and changing surface pavement to break the road into smaller visual units. These techniques may cause drivers to slow down. These techniques also encourage motorists to widen their field of vision, thus becoming much more aware of pedestrians and bicyclists. Proper changes in road design encourage traffic to travel at a slower, more even pace.

All traffic management techniques have a limited range of effectiveness. To achieve their objectives, some techniques need to be placed every few hundred feet. If techniques are used too sparsely, traffic may slow upon reaching the installation, but the overall speed along the street will probably not decrease. One technique may be used multiple times or multiple techniques may be used in conjunction with one another. Some techniques can affect emergency service response, traffic noise, air quality, congestion, fuel consumption and many other factors. Some can have a positive effect on these conditions while others may have a negative one.

Emergency vehicle access and response time will be carefully considered when designing and installing traffic management devices. Studies have shown that some devices may slow response times up to ten (10) seconds per device. This impact **must** be understood and considered by neighborhood residents when requesting their traffic management program.

Likewise, bicyclists, pedestrians and other street users must be considered when developing a program because some devices can obstruct their movements. Many devices can be modified to allow bicyclists and pedestrians to bypass them. For instance, a diverter can be fitted with a bicycle/pedestrian path to facilitate those users' particular access needs.

Options for neighborhood traffic management procedures have been structured into stages. The first stage is the least restrictive and typically has the lowest cost, while other stages are more restrictive and more costly, and may require approvals beyond the process outlined in the CEPTMP. These options have been chosen for their impact on vehicle speeds and volumes on residential streets.

The focus of this program is to address the overall neighborhood concerns. Although a change may occur on only a single street, the TED staff will review how the change impacts the rest of the neighborhood. In most cases multiple streets will be involved utilizing a variety of different traffic management techniques to find the best approach to address the entire neighborhood's concerns.

Because residents are the main initiators and beneficiaries of a traffic management program, it is critical that they be as much a part of the process as possible. Developing a program early on which addresses neighborhood traffic safety and livability concerns on an area-wide basis encourages citizens to become actively involved in the improvement process. In this way, the City staff and residents can work together to create safer and more livable neighborhoods throughout El Paso.

Note: Major roads, arterials, collector streets, and mulit-lane roads are not eligible for neighborhood traffic management. These roadways are meant to handle larger amounts of traffic at higher speeds than local residential streets. Other streets, because of their special conditions or individual characteristics, may not be eligible for CEPTMP. In addition, consideration must be given to the impact that neighborhood traffic management procedures may have on the ability of emergency responders to respond safely to emergencies. The intent of this program is not to solve internal residential conflicts. The role of the TED is to help mitigate the effects of speeding motorists caused by deficiencies in the City's thoroughfare system. The City will work with neighborhoods to offer strategies to help it solve its own internal issues. **The CEPTMP is intended to help neighborhoods associations and watches help themselves.**

Guiding Policies and Definitions

Physical or operational changes to streets will be made only if less intrusive techniques fail to provide relief. Before and after data will be gathered in every situation to evaluate the effectiveness and impact of a traffic management technique. Traffic management seeks to modify the behavior of drivers to what is appropriate for residential streets. The policies governing the intent and application of this program include:

1. This program applies to existing residential streets that serve single-family residential neighborhoods. The neighborhood must be entirely within the City

of El Paso. This program will work with neighborhood watches and associations, not individual citizens.

2. Cut-through traffic is defined as: traffic having no immediate starting point or destination in the greater residential neighborhood being evaluated. This traffic traditionally flows on the major roadways, but may be finding its way into residential streets.

3. The amount of re-routed traffic that is acceptable as a result of a traffic management project should be defined on a project-by-project basis. It is not the intent of this program to simply relocate traffic or traffic concerns to other residential streets, although it may be desirable to balance traffic across a network of residential streets.

4. Emergency vehicle access within and through neighborhoods will be carefully considered in the evaluation of traffic management and must be preserved in a reasonable fashion. It is recognized that certain traffic management techniques may result in increased emergency response times to certain streets and neighborhoods. These impacts must be understood and considered by the neighborhood when requesting a traffic management program.

5. The City of El Paso TED shall employ a variety of traffic management strategies and techniques to achieve the CEPTMP objectives. Techniques that have less of an impact to residents will be utilized before harsher techniques are considered. Street conditions will be evaluated before and after use. All locations will begin with education and enforcement. If these efforts do not meet the program goals, physical changes or restrictions to the roadway will be considered.

6. Traffic management strategies and techniques shall be planned and designed in conformance with sound engineering practices. All plans will be reviewed and approved by the TED staff before implementation to ensure that proper engineering guidelines have been followed. The TED staff will make changes as necessary to ensure safe, sound engineering principles are implemented.

7. The CEPTMP involves a strategic step approach to neighborhood traffic management. Arterial and Collector streets in residential areas are essential to neighborhoods. They may be residential roadways, but handle a large amount of volume. We encourage the use of these roadways to relieve congestion on the rest of the neighborhood.

The Process

The following procedures are considered typical for receiving, responding to and managing residents' requests for a neighborhood traffic management program. The TED staff will apply this process to all requests received. Variations in this process may be approved by the staff when deemed appropriate due to unique circumstances.

STEP 1: Contact the Traffic Engineering Division staff

A neighborhood watch or association representative can contact the TED to discuss neighborhood traffic problems or concerns. If a citizen calls, the staff will work with that citizen, listen to concerns, conduct a preliminary investigation, and offer solutions to his/her concern. The TED will direct the citizen to work through the neighborhood watch or association to participate in this program. This program is intended to treat an entire neighborhood.

STEP 2: The Staff will Conduct Field Inspections

The TED staff will send a representative to investigate traffic concerns and evaluate the neighborhood conditions to see if an unusual traffic condition exists. The staff representative will contact the representatives of the neighborhood watch or association to review the findings. The decision on how to proceed is determined by the TED staff.

STEP 3: The Staff will Develop a Preliminary Analysis of the Neighborhood Study Area

The TED staff will perform any necessary data collection and analysis to assess and quantify the traffic and safety conditions in the neighborhood study area. The TED staff will identify the tentative study area, collect preliminary information from the files, and complete any needed traffic analysis. The staff will refer to the following guidelines when evaluating the magnitude of traffic and safety's problems, determining potential for improvement using CEPTMP, and establish priorities for project implementation according to the following:

A. Speeding

Speeding problems exist when people are exceeding the speed limit. It is the intent of this program that when a speed study shows that thirty-five percent of the traffic is traveling over the posted speed limit, the situation warrants additional measures. All streets will be ranked on speed for prioritization purposes.

B. Cut Through Traffic

A traditional home will generate between eight (8) and ten (10) trips daily, so you could expect a neighborhood study area with 100 homes to have average daily traffic (ADT) volume between 800 and 1000 without any additional outside traffic. Cut-through traffic is typically quantified by estimating actual traffic generation from within the affected area and from outside the neighborhood or street. Out of the total traffic measured, cut-through traffic should represent at least as much as the study area's self-generated total ADT to justify CEPTMP efforts.

C. Accidents - Pedestrians, Bicycles, Autos

In addition, accident history may be considered in the ranking system when there are three (3) or more reported accidents along a single residential street within twelve consecutive months. The length of the roadway shall be no longer than half a mile for purposes of accident history. If the roadway is longer it shall be divided into lengths of approximately one-half mile.

D. Street Grades and Alignment

Some physical traffic management devices will not be installed on streets with grades exceeding eight percent, or where a combination of vertical and horizontal alignment would result in inadequate stopping sight distance for motorists encountering these devices. These situations will be evaluated on a case-by-case basis.

E. Emergency Routes

Traffic management devices are not typically installed on streets serving as a designated primary emergency access route.

STEP 4: Neighborhood Involvement

Neighborhood watch or association representatives must submit a completed application to the TED confirming that the neighborhood wishes to participate in a traffic management program. The TED staff will review the application for thoroughness. If appropriate, the TED staff will introduce a step approach to the neighborhood, starting with driver education and enforcement. The TED staff will be responsible for approval of the neighborhood traffic management program and its "affected area". If a program is denied by the TED staff, the affected neighborhood watch or association may appeal that decision to the City Council.

STEP 5: Traffic Team

The TED staff and representatives of other potentially affected City agencies will meet with the Traffic Team to discuss traffic problems and concerns, potential solutions, set goals, and define affected area. The traffic team will create a plan based upon a list of available options for the neighborhood. These options will ultimately be proposed for neighborhood approval. If a technique is not successful based on an engineering study/assessment, the Team may move on to more aggressive techniques. This process continues until a successful solution is found.

STEP 6: Education and Enforcement

The TED staff will schedule the neighborhood to receive monthly enforcement traffic management updates. The TED staff, in cooperation with the Police Department, will attempt to schedule officers to enforce speed limits during peak hours. In addition, radar speed trailers may be used to educate drivers and raise their awareness level while traveling on residential roads.

STEP 7: The Approval Process

To proceed further with CEPTMP project design and implementation, a positive response must be obtained by 67 percent or more of the total number of residents in the effected area. Only one vote shall be allowed per residence (owner). All original responses, including those votes cast in opposition to the proposal, shall be provided to the TED. The purpose of this process is to obtain neighborhood approval of the traffic management techniques proposed by the Traffic Team. Previously submitted petitions or applications that met the submittal criteria in place at the time, shall be considered valid petitions or applications under this program.

STEP 8: Project Implementation

When a CEPTMP project has received the necessary neighborhood support, the TED staff will schedule implementation of the project based on funding availability. **If funding is required, it will be provided by the neighborhood watch or association themselves, through an alternate source (donations, etc), or it can be provided for them at the discretion of the area's City Representative (through discretionary funds) or by the City Council as a whole.** Depending upon the number of CEPTMP requests received and the available funding for design and construction, a project may be placed on a waiting list and prioritized based on the severity of the neighborhood's situation. Ongoing landscaping will be the responsibility of the neighborhood. Any necessary property dedication or landscape maintenance agreement shall be completed prior to final project installation. The landscaping must be maintained by the neighborhood association as stated in the landscape agreement or the City will take appropriate corrective steps in accordance with the agreement. Certain techniques may be installed as trials, while others may be more permanent installations. All installations will be monitored and evaluated by the TED staff for effectiveness.

STEP 9: Monitoring and Evaluation

After completion of each step of the project, the TED staff will evaluate the effect. Traffic counts, speed studies and other data collection will be taken as needed. If the project has not met its objectives within the monitoring period, staff will notify the traffic team. The staff and the Traffic Team may then consider moving to the next level of traffic management techniques. Once the goals have been achieved, the project will be considered finished without relevance to the particular step or phase it was in. If all stages of a project have failed to meet set goals, the Traffic Team will re-evaluate the situation and work toward possible solutions.

STEP 10: Removal of a CEPTMP Project

If the TED staff decides that the project should be modified or removed for public health and/or safety reasons, the City shall remove or modify the traffic management technique. If the neighborhood decides that the traffic management devices should be removed or significantly altered, the neighborhood must furnish petitions and signatures of more than 67 percent of households (owners) in support of the removal or alteration. The neighborhood may be asked to share in the cost of removal or alteration of the project. The neighborhood will not be eligible for any other traffic management program for a period of five years. The roadway must be left in a safe condition that meets the City's requirements.

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM APPLICATION
City of El Paso, Texas

(Complete and submit to the City of El Paso Traffic Engineering Division)

PART ONE

Neighborhood Watch Program or Association Name _____

_____

Located on _____ Street / Drive / Avenue / Lane

between _____ and _____

Block Captain's / President's Name _____

Address _____ El Paso, Texas _____

Phones: Home _____ Work _____

Date _____

In accordance with City of El Paso Guidelines, our Neighborhood Watch / Association, I request that the City initiate a feasibility study to determine if we are candidates for a Traffic Management Program in our block / area.

PART TWO

I certify that I have coordinated with each household owner in our designated area, asking them whether or not participating in our Program, and 67% or more have specifically endorsed such participation. We understand that the program decisions are at the discretion of the City of El Paso's Traffic Engineering Department and made in accordance with established criteria, the applicable engineering standards, and the availability of funding. The decision by City staff to reject particular modifications in an area is final. I further confirm that the signatures below, to include my own, are valid and document _____ % support (_____ households of _____ total households).

Block Captain's / President's Signature _____ Date_____

Watch / Association _____ Date _____

Address	Printed name	Signature	Phone
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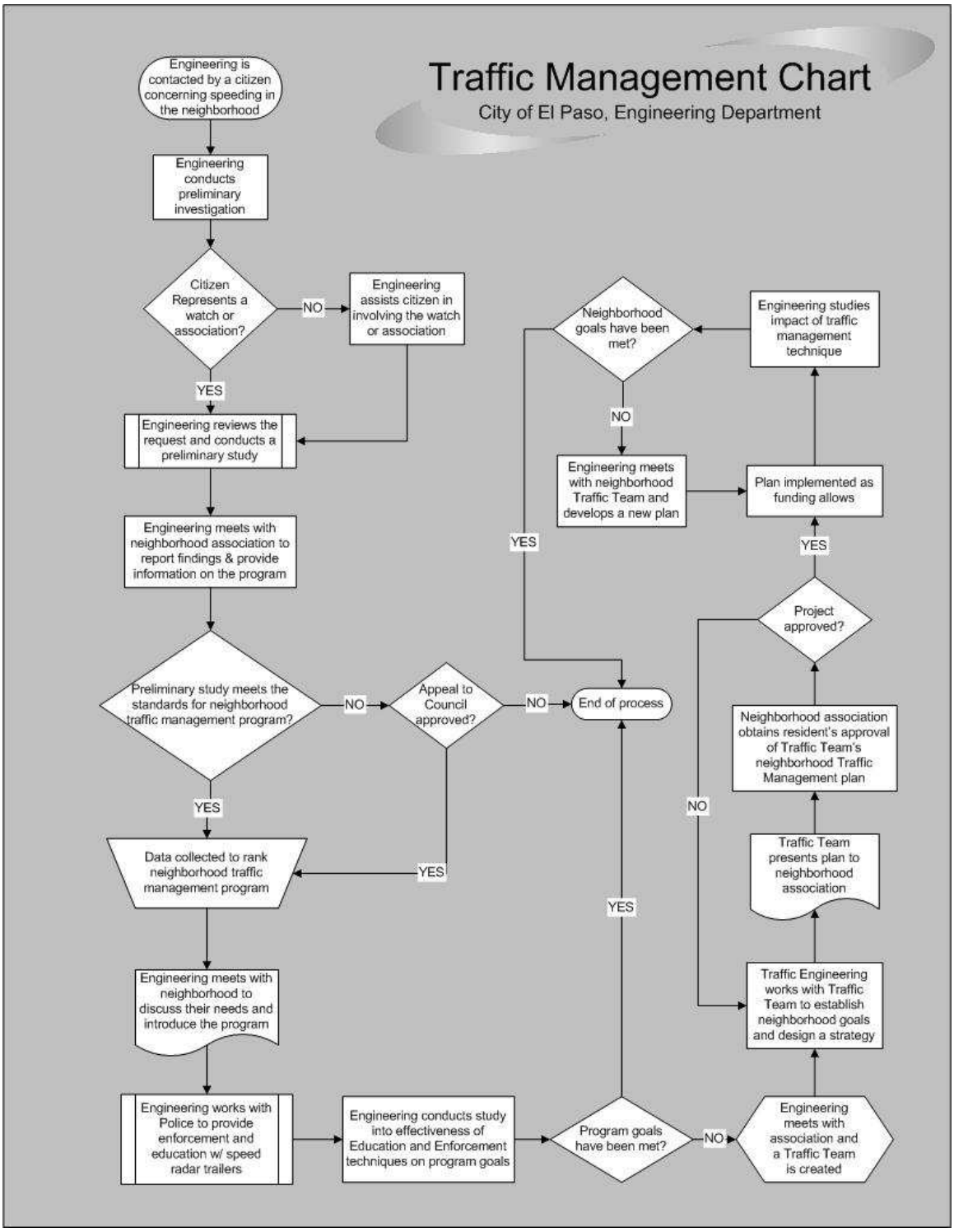
Traffic Management Chart
City of El Paso, Engineering Department
Engineering is contacted by a citizen concerning speeding in the neighborhood
Engineering conducts preliminary investigation
Citizen Represents a watch or association?
NO
Engineering assists citizen in involving the watch or association
YES
Engineering reviews the request and conducts a preliminary study
Engineering meets with neighborhood association to report findings & provide information on the program
Preliminary study meets the standards for neighborhood traffic management program?
NO
Appeal to Council approved?
NO
End of process
YES
Data collected to rank neighborhood traffic management program
YES
Engineering meets with neighborhood to discuss their needs and introduce the program
Engineering works with Police to provide enforcement and education w/ speed radar trailers
Engineering conducts study into effectiveness of Education and Enforcement techniques on program goals
Program goals have been met?
NO
YES
Engineering meets with association and a Traffic Team is created
Traffic Engineering works with Traffic Team to establish neighborhood goals and design a strategy
Traffic Team presents plan to neighborhood association
Neighborhood association obtains resident's approval of Traffic Team's neighborhood Traffic Management plan
Project approved?
NO
YES
Plan implemented as funding allows
Engineering meets with neighborhood Traffic Team and develops a new plan
NO
Neighborhood goals have been met?
YES
Engineering studies impact of traffic management technique